

The State Board of Registration for Professional Engineers and Land Surveyors met on Tuesday, March 19, 2013, via teleconference at the Professional Licensing Boards Division, 237 Coliseum Drive, Macon, Georgia.

**The following Board members were present:**

Michael S. Fletcher, PE, Chair  
Mark E. Chastain, LS, Vice-Chairman  
Brian K. Upson, PE  
George Howroyd, PE  
William Womack, PE

**Board members absent:**

Elmo A. Richardson, Jr., PE/LS  
James W. Butler, LS  
L.H. (Dan) Davis, PE  
Matthew W. Baxter, Consumer Member

**Staff present:**

Darren Mickler, Executive Director  
Swan LeGrand-Fleming, Board Support Specialist  
Julie Busbee, Licensure Supervisor

**Attorney General Representative:**

Amelia Baker, Senior Assistant Attorney General

**Guests present:**

No guests were present.

**Call to Order**

At 9:34 a.m., Chairman Fletcher established that a quorum was present and called the meeting to order.

**Public Hearing**

At 9:35 a.m. Mr. Mickler presented amended Board Rule 180-7-.07. There were no guests from the public in attendance. Hearing closed at 9:37 a.m.

Chairman Fletcher asked for a motion. Mr. Chastain moved to adopt Board Rule 180-7-.07 as presented.

180-7-.07 Maps and Plats.

All maps, plats and similar documents which depict and describe real property boundaries shall comply with all requirements of O.C.G.A. 15-6-67 and conform to the following minimum standards and specifications:- The sealing of documents, reports, preliminary subdivision plats, topographic surveys, and other drawings that do not depict and describe real property boundaries shall be subject

to Rule 180-12 (Sealing of documents). Preliminary subdivision plats shall state the source of the boundary information shown thereon and also bear a note to the effect that it is a preliminary subdivision plat that has been prepared for the purpose of review and approval, is not to be recorded, and is not to be used to convey property. Topographic surveys shall state the source of the boundary information shown thereon and also bear a note to the effect that the surveyor's certification extends only to the topographic aspects and that the topographic survey does not constitute a boundary survey and is not to be recorded or used to convey property.

(a) Material.

1. Any such surveys, maps, or plats shall be clearly legible.
2. The minimum line widths and letters or character heights delineated on such maps or plats shall be as follows: sufficient to be legible when copied or scanned at a resolution of 200 d.p.i.
  - (i) ~~Maps or plats drawn on 8½ inch by 11 inch or 8½ inch by 14 inch tracings shall have a minimum line width of 0.010 inches and a minimum letter or character height of 0.080 inches;~~
  - (ii) ~~Maps or plats drawn on 11 inch by 17 inch tracings shall have a minimum line width of 0.010 inches and a minimum letter or character height of 0.080 inches; or~~
  - (iii) ~~Maps or plats drawn on 17 inch by 22 inch or 24 inch by 36 inch tracings shall have a minimum line width of 0.013 inches and a minimum letter or character height of 0.080 inches.~~

(b) Caption. The maps or plats shall have a title or name, which shall be contained in the caption, and the caption shall also provide the following information:

1. The name of the ~~current owner of the property or the entity~~ who authorized the survey, the entity for whom the survey is prepared, or the subject of the survey such as a subdivision name or site name.
2. The county, city, town or village, land district and land lot, and subdivision, if the property line lies within a particular subdivision;
3. The date of plat preparation and all subsequent revisions;
4. The date(s) of field survey;
5. The scale, stated and shown graphically;
6. The name, address, telephone number, and registration number of the registered land surveyor who prepared and sealed the survey and, if working for a firm, the name and Certificate of Authorization Number of the firm that prepared the survey (the address and telephone number of the firm are acceptable in lieu of the individual surveyor's address and telephone number) or the statement that he is the county surveyor and is not required by law to be a registered surveyor; and
7. All reproductions of original maps or plats shall bear the original signature, in ~~black~~ a contrasting color of ink, of the registrant placed across the registration seal, in order to be a valid or recordable

map or plat. The original maps or plats shall be retained by the land surveyor or land surveying firm in either hard copy or digital file, along with all applicable work material which includes but is not limited to field notes, field data, computations, coordinate data, electronic drawing files and property research for a period of six years from the most recent date on the map or plat.

(c) Size. Maps and plats shall be of a size that complies with O.C.G.A. 15-6-67, except that larger maps and plats may be prepared if a reduction to 24 inches by 36 inches is available which is legible when scanned at 200 dpi. not be less than 8½ inches by 11 inches and not larger than can be recorded in the county of record without folding. ~~In counties using microfilming procedures, when a map or plat is filed for record, the original drawing, which shall not be larger than 24 inches by 36 inches, shall be submitted to the clerk for microfilming and a legible copy, which shall not be larger than 17 inches by 22 inches, shall be filed for record; provided, however, that a full-size positive copy of the original may be tendered and used for microfilming. The clerk shall enter the filing date, plat book number, and page number on the original drawing and return the original drawing to the land surveyor or the person filing the same for record.~~

(d) Data. All maps or plats shall be made in a professional manner and in accordance with the standards of good drafting procedures and shall show the following information, as specified:

1. The direction and distance from a point of reference to a point on the boundary of the individual survey, and such additional data as may be required to relocate the boundary point from the point of reference with the same degree of accuracy required of the parcel surveyed. The point of reference shall be an established, monumented position which can be identified or relocated from maps, plats or other documents on public record, including state plane coordinates when applicable. The point of reference may lie on or within the boundary of the survey.

2. ~~Bearings of all lines or angles at all corners and angle points~~ of the boundary or lot lines, and distances of all boundary or lot lines, and area of the parcels expressed in acres or square feet . All bearings, distances, and areas shown on the survey shall be based upon the measurements of the surveyor, except that both the measured and the record measurements may be shown if the surveyor feels that such comparison is necessary or otherwise required, in which case a clear distinction shall be made as to which are measured and which are record. Distances that are shown for proximity purposes only and have not been measured shall be clearly labeled as “approximate”;

3. The closure precision of the field survey as the ratio of one foot to the traversed distance in which an error of one foot would occur, angular error, and a statement as to the method of adjustment. The field closure stated shall be the actual linear error of closure calculated from the surveyor’s actual field measurements, whether a closed traverse or otherwise, and shall not be a generalization. The closure may be stated as follows:

“The field data upon which this map or plat is based has a closure precision of one foot in \_\_\_\_\_ feet, and an angular error of \_\_\_\_\_ per angle point, and was adjusted using \_\_\_\_\_ rule” or If the surveyor determines that a closure precision statement is not appropriate for the survey because a substantial portion of the field measurements were obtained using Global Positioning Systems, then a note of precision or positional accuracy may be placed in compliance with rule 180-7-.09; or if the surveyor feels that a closure precision statement is not appropriate for the survey because redundant linear

measurements were used to verify accuracy, the calculated positional tolerance shall be stated and shall comply with rule 180-7-.03.

4. The closure precision of the data shown on the map or plat. The closure may be stated as follows: “This map or plat has been calculated for closure and is found to be accurate within one foot in \_\_\_\_\_ feet” The closure precision placed on the survey shall be based on an actual map closure that has been independently calculated by the surveyor by using the bearings and distances from the face of the plat, and shall not be a generalization. All lots or parcels shown on the plat shall be map checked for closure and area. In the case of a subdivision plat or a survey that depicts more than one tract, the closure precision stated may be that of the exterior or an average of the tracts;

5. The width and the former widths, if pertinent, of ~~all easements or~~ rights-of-way adjacent to or crossing the property ~~or adjacent to any point of reference,~~

6. ~~All easements and~~ Apparent encroachments, ~~if pertinent~~ and observed evidence of human burials or cemeteries.

7. In the case of curved lines, the curve shall be defined by curve data to include the radius, arc length, chord bearing, and distance of regular curves. Chord distances and directions shall be given for irregular curves;

8. All land lot lines, land district lines, land section lines, and city, county, and state boundaries intersecting or adjacent to the surveyed property indicated by lines drawn upon the map or plat with appropriate words and figures, it shall be acceptable for the surveyor to label such lines as “apparent”, “accepted”, or “approximate”, or other such qualifying language as the surveyor considers necessary or appropriate;

9. All corner markers and markers of pertinent reference points shall be fully described and indicated as to the material or types, size or dimensions, and whether set or found, or replaced. In the case of badly disturbed or deteriorated monuments that are replaced for the purpose of position preservation, the survey shall indicate the size, type, and material of both the found monument and the monument with which it was replaced. ;

10. An arrow to indicate the principal meridian and a notation as to the reference of bearings to magnetic north, astronomic north, record or grid north. A grid north reference shall indicate the zone . Record north shall reference the document or survey to which the meridian is oriented and the line of the survey to which the “record bearing” was applied to ;

11. ~~All linear distances shown on maps or plats shall be horizontal.~~

All linear distances shown on maps or plats shall be expressed as follows:

a. Distances shall be horizontal distances.

b. Distances shall be stated as “ground” distances (which shall also be the basis for any corresponding area calculations). Should it be necessary to state “grid” distances, both “ground” and “grid” distances shall be stated, along with the grid scale factor used, the elevation scale factor used, and the combined factor used.

c. When expressed in feet, the definition of the foot shall be the U.S. Survey foot (39.37 inches = 1 meter); nothing in this rule shall prohibit the stating of distances in metric or units rather than feet, provided that a conversion factor to U.S. Survey Feet must be stated.

12. All angular directions shall be represented in degrees and , minutes , and seconds. Where plats state or surveys require accuracy in excess of 1 in 5000, the angular directions shall be represented in degrees, minutes, and seconds. All angular directions shall be referenced to the principal meridian of the survey and be denoted starting with the letter N or S (for North or South), the degrees, minutes, and seconds, followed by the letter E or W (for East or West). All bearings and distances around the perimeter of the property shall progress consistently in either a clockwise or counter-clockwise direction so as to form a closed shape. Azimuths, or interior (or exterior) angles may also be shown for reference but not in lieu of bearings and shall also be stated in degrees, minutes, and seconds ;

13. A statement to indicate the type of equipment used to obtain the linear and angular measurements used in the preparation of the map or plat , or the proper notations required by Rule 180-7-.09 when GPS equipment is used in performing the survey ;

14. The names of adjacent property owners on all lines, along with a notation as to what documents were reviewed for each adjacent property as required by Rule 180-7-.02(1)(a). Such notation may be the deed book and page of the record title description, recorded plats, and other documents or surveys that were obtained through the course of the survey. In cases where the adjacent property is a recorded subdivision, it is sufficient to state the name, phase if applicable, and recording information of the subdivision plat, along with lot lines and lot numbers. as can be determined at the time of commencement of the survey through public records such as the county tax assessor and/or clerk of court records. (A title search is not required for this.)

15. All water boundaries or similar irregular boundaries shown in sufficient detail to clearly identify the surveyed tract and the adjoining tract;

16. The character of any and all evidence of possession along or related to boundary lines clearly depicted and stated, and the location of such evidence carefully given in relation to the surveyed boundary lines, including all apparent easements and right-of-way; and overlaps and gores in property lines along or within the surveyed property in compliance with Rule 180-7-.02

17. Any features within or along the boundary located as requested by the client , or in conformity with the rules or requirements of any mortgagor or insurer, provided the technical standards of such rules or requirements are not less than those provided for by this chapter.

18. The surveyor shall state the type of survey depicted, whether it is a retracement survey of an existing tract (or combination of tracts), a subdivision plat, a division from a parent tract, a depiction of a disputed area or other special purpose limited survey, a utility or easement survey, or other classification of land survey as may be deemed necessary. The source of title description of the property depicted shall be stated, along with the name of the current owner(s) as indicated by tax records or deeds.

19. A certification adjacent to the seal stating that the survey was prepared in conformity with The Technical Standards for Property Surveys in Georgia as set forth in Chapter 180-7 of the Rules of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in the Georgia Plat Act O.C.G.A. 15-6-67. Authority O.C.G.A. Secs. 15-6-67, 43-15-4, 43-15-6, 43-15-19, 43-15-22.

Mr. Upson seconded. The motion carried unanimously.

### **Executive Session**

No executive session was conducted.

With no other business to discuss, Mr. Chastain moved to adjourn. Mr. Upson seconded. The meeting adjourned at 9:41 a.m.

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Michael S. Fletcher, Board Chairman

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Darren Mickler, Executive Director

These minutes were adopted at the Tuesday, May 14, 2013 meeting. The next scheduled meeting is Tuesday, August 13, 2013.